



# Wavetalk™ 2

## Wavenis 868 MHz wireless range extender

Wavetalk 2 is a simple Wavenis® wireless range extender that relays data transparently between Wavenis wireless devices in order to increase the distance between them when necessary. Even though Wavenis technology offers wireless range that is among the longest in the industry, there are situations where wide area coverage is required.

Typically used to link end-points and gateways, up to three Wavetalk 2 modules can be placed a Wavenis gateway and end-point.

- Extends Wavenis wireless range up to 4 km (2.5 mi) per repeater
- Supports up to 3 repeaters per branch
- Transparent data relay
- Sends alert spontaneously in case of low-battery<sup>(1)</sup>

### Field-ready Wavenis platform



Wavetalk 2 is delivered ready-to-use. Robust, weatherproof casing ensures safe and reliable operation in the field. With its powerful integrated battery, Wavetalk 2 offers worry-free operation for several years, helping to keep field maintenance costs down over time.

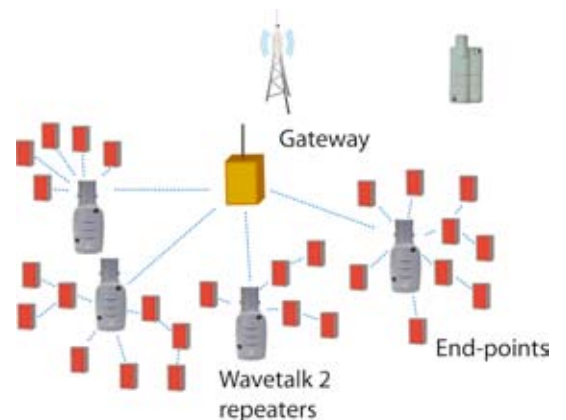
- Ready-to-use module in IP68 casing
- More than 10 years<sup>(3)</sup> autonomy
- Supports Wavenis synchronous or asynchronous networks

### The key to the network backbone

Wavetalk 2 range extenders are used in wireless network scenarios of all sizes to bridge the gap between distant Wavenis products. These modules offer full 2-way communications as a key part of large-scale Wavenis wireless networks. Connected to an Ethernet or GPRS gateway, which serves as the root device in a given network (see diagram below), they provide the wireless backbone for end-points that would otherwise be beyond the wireless range of the gateway.

Before deployment, a site survey is carried out in order to establish the best locations for installing the Wavetalk 2 modules. Once the range extenders are activated, field technicians simply add Wavenis end-points to the network using PDA-based software tools. Range extenders offer automated self-configuration and self-routing<sup>(1)</sup> in order to bring the network up quickly.

- Range up to 4 km/2.5 mi (500 mW) or 1 km/0.6 mi (25 mW)
- Enhanced power saving technology
- Easy one-touch configuration in the field<sup>(4)</sup>





## Wavetalk 2



### Ultra-low-power wireless range extender

- Ideal for fixed network M2M applications
- IP68 plastic casing, ready-to-use
- Battery life up to 10 years<sup>(3)</sup>
- Recommended load: up to 25 “child” nodes in synchronous mode; up to 50 in asynchronous mode<sup>(2)</sup>

### Fully ready to use

- Supports 25 mW and 500 mW communications, with automatic switching
- Transmits alert in case of low battery<sup>(1)</sup>
- Automatically transmits module status and alerts to administration tools
- One-touch configuration and insertion into networks with Wavegate Ethernet/GPRS gateways<sup>(4)</sup> (Note: routing tables are stored both on gateway and back-end system)

### Wavenis wireless connectivity

- Designed for large-scale wireless sensor networks where long range and ultra-low power consumption are critical
- Transfers data wirelessly between end-points and a Wavenis / Ethernet / GPRS gateway
- 2-way communications to relay data transmission, automatic alerts and on-demand reading
- Robust against physical and electronic interference
- Cascade up to 3 range extenders for up to 12 km/7.5 mi total range
- Highly optimized for long battery life in the field
- Smart wake-up to avoid unnecessary communications
- Supports fixed networks using Wavenis synchronous or asynchronous modes

### Product information

- Wavenis® 868 MHz:
  - 25 mW mode with range up to 1 km/0.6 mi (line of sight)
  - 500 mW mode with range up to 4 km/2.5 mi (line of sight)
- 3.6V (13 Ah) Lithium battery
- Fully sealed IP68 casing: 12.7 x 5.4 x 4.9 cm (5 x 2.1 x 1.9 in)
- 350 g (12.3 oz)
- Operating temperature: -20° to +70° C (-4° to 158° F)
- EN 300-220 compliant

### Related Coronis products

- Standard Coronis modules
- Wavegate GPRS/Ethernet gateways
- Waveport Bluetooth
- Wavenet Manager configuration, network management and data monitoring server
- Wavesync software for network synchronization

### Product codes

*This document describes the features and functions of the Coronis Wavetalk 2 868 MHz products. Please contact your Coronis representative for information on repeater products for 915 MHz and 433 MHz regions. Wavetalk 2 is compatible with all current and previous generations of Wavenis-enabled products.*

<sup>(1)</sup> In Wavenis synchronous mode networks only. <sup>(2)</sup> 25 child nodes with Wavenis synchronous mode and 1 transmission per day by each end-point; 50 child nodes with asynchronous mode operation and 1 transmission per month by each end-point. <sup>(3)</sup> Depending on the number of connected end-points and the frequency of wireless access. <sup>(4)</sup> Automatic network construction using Self-discovery Protocol with Wavesync software on PDA with Waveport Bluetooth. Wavesync and Waveport Bluetooth sold separately.



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